OpenCV Installation Guide

This is a guide for the installation of OpenCV (Python version) in Windows and Linux systems.

To be able to install OpenCV-Python the system needs to have Python installed and a package manager such as PIP. This document will guide you through the installation of these as well.

For Windows

1. Start by checking if you already have Python installed. Open the Command Line by searching for `cmd` in the Run dialog (⊞ + R) and run the command:

```
python --version
```

If Python is already installed it will generate a message with the available Python version.

If Python is not installed, follow the steps in https://medium.com/co-learning-lounge/how-to-download-install-python-on-windows-2021-44a707994013.

2. Now let's check if PIP is installed. PIP is a package management system for libraries written in Python. Once again, run the following command in the Command Line:

```
python -m pip --version
```

If PIP is already installed the command will show where it is installed.

If PIP is not yet installed, run:

```
python -m ensurepip --upgrade
```

You can also follow the alternative steps described in:

https://pip.pypa.io/en/stable/installation/

3. Finally, having PIP installed, OpenCV can simply be installed by running:

```
pip install opencv-python
```

You can check if it was correctly installed by running:

OpenCV Installation Guide

```
python
>>>import cv2
>>>print(cv2.__version__)
```

For Linux

1. Start by checking if you already have Python installed. Open the Terminal (Ctrl+Alt+T) and run the command:

```
python --version
```

If Python is already installed it will generate a message with the available Python version.
If Python is not installed, run these commands:
```
sudo apt update
sudo apt install python3.xx
```
Replace the xx with the desired version, for example python3.9.

2. Now let's check if PIP is installed. PIP is a package management system for libraries written in Python. Once again, run the following command in the Terminal:

```
pip --version
```

If PIP is already installed the command will show where it is installed.

If PIP is not yet installed, run:

```
python -m ensurepip --upgrade
```

You can also run:

```
sudo apt install python3-pip
```

or follow the alternative steps described in:

https://pip.pypa.io/en/stable/installation/

OpenCV Installation Guide

3. Finally, having PIP installed, OpenCV can be simply installed by running:

```
pip install opencv-python
```

You can check if it was correctly installed by running:

```
python
>>>import cv2
>>>print(cv2.__version__)
```